

## **Chapter 2**

### **Objectives of Landscape Planting**

#### **2-1. Background**

The primary objectives of plantings at levees, floodwalls, and dam embankments are to harmonize the development with the surrounding natural and human environment, enhance structures, control dust and erosion, separate activities, provide privacy or screen out undesirable features, provide incidental habitat for wildlife, and create a pleasant environment for recreation. Planting will be naturalistic and will avoid “arboretum-type” planting (many different species). In certain instances, additional objectives may have to be satisfied. These should be set out in the criteria conforming to the vegetation policy stated in paragraph 1-3.

#### **2-2. Vegetation-Free Zone**

The vegetation-free zone is an area adjacent to the landside and/or riverside toe of the levee, floodwall, or embankment dam and appurtenant structure where no type of vegetation, with the exception of grass, is permitted. This zone is required for maintenance and flood-fighting activities and must be easily accessible at all times.

#### **2-3. Root-Free Zone**

The root-free zone provides a margin of safety between the greatest expected extent of plant roots and the beginning face of the basic project structure (see Figures 2-1, 3-1, and 3-2). The basic project structure is the engineered feature required for human safety. The bottom of the root-free zone will be the external limits of the cross section of the levee, embankment, or floodwall established by the design engineer for stability and/or seepage control. Knowledge of the rooting habit of each plant selected is required for use in the landscape planting plan. Landscape planting plans will reflect full recognition of the importance of electing plant species and cultivars, clones, or sports thereof, the roots of which will not penetrate into the root-free zone. Some type of barrier such as geomembrane, will be required at the limits of the root-free zone where root penetration is possible. This barrier should not retard groundwater or seepage flow.

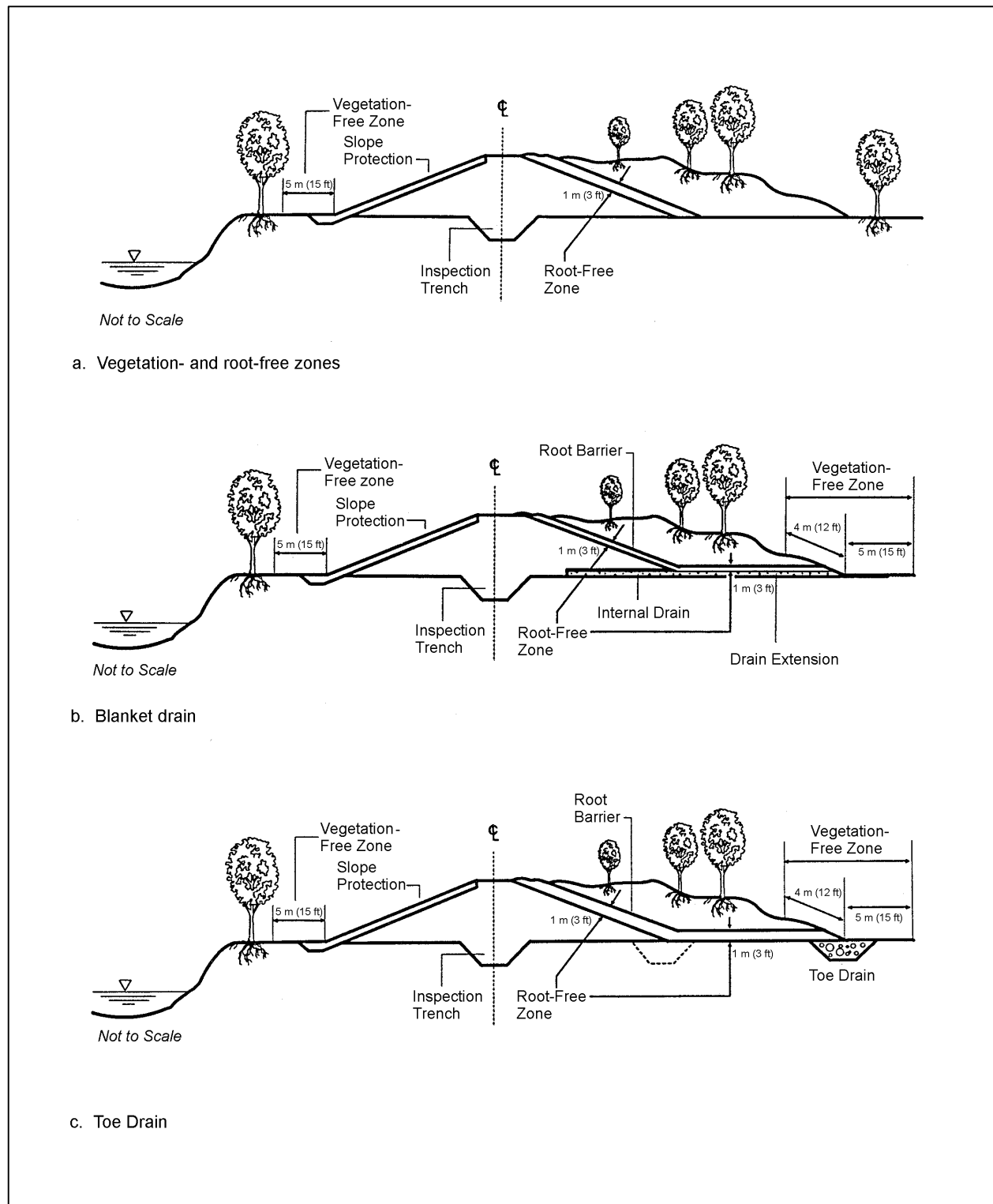


Figure 2-1. Basic levee project structure, with landscape planting